

## OUR ENVIRONMENT

Q.1. What is meant by the term environment?

Ans: All the living organisms or biotic factors and the physical surrounding with which an organism interacts, constitutes its environment.

Q.2. Name any two biodegradable wastes.

Ans: Wool, leather items (shoes, belt, purse etc) excreta, vegetable peel

Q.3. Name any two non-biodegradable wastes.

Ans: Aluminium foil, plastic, polythene bags, glass, pesticides.

Q.4. Define an ecosystem.

Ans: Ecosystem is a functional unit consisting of biotic community and abiotic factors, which interact among themselves and maintain a balance.

Q.5. Name two aquatic ecosystems.

Ans: Ponds and lakes.

Q.6. Name two terrestrial ecosystems.

Ans: Forests, grasslands, crop-fields.

Q.7. Give two examples of artificial ecosystems.

Ans: Garden, Aquarium.

Q.8. Which is the ultimate source of energy for an ecosystem?

Ans: Sun.

Q.9. Name the category of organisms which feed the energy into the ecosystems.

Ans: Producers.

Q.10. Give the scientific term for organisms which feed directly on plants.

Ans: Herbivores/ Primary Consumers.

Q.11. Define food chain.

Ans: Food chain can be defined as the transfer of energy from producers through a series of organisms with repeated eating.

Q.12. What is meant by trophic level?

Ans: Each step or level in a food chain is called a trophic level.

Q.13. How much of solar energy falling on the leaves, is captured by the plants?

Ans: One percent (1%).

Q.14. How much of organic matter is available at each trophic level to reach the next level?

Ans: Ten percent (10%).

Q.15. Name the type of organisms that occupy (i) the first trophic level and (ii) the second trophic level.

Ans: (i) Autotrophs or producers.

(ii) Herbivores or Primary Consumers.

Q.16. Define Biomagnification

Ans: Biomagnification is a phenomenon in which certain harmful chemicals enter the organisms and become concentrated at higher trophic levels, as they travel along the food chain.

Q.17. Expand UNEP.

Ans: United Nations Environment Programme.

Q.18. Name the chemical mainly responsible for the damage of ozone layer.

Ans: Chlorofluorocarbons (CFCs).

Q.19. Where are CFCs used?

Ans: Chlorofluorocarbons are used in

a) Refrigerators

(b) Fire extinguishers.

Q.20. What are the problems caused by the non-biodegradable wastes that we generate?

Ans: The non-biodegradable wastes are inert and persist in the environment for a long period of time, they are very slowly acted upon by physical processes like heat and pressure. They may harm the various members of the ecosystem, by entering the food chain.

Q.21. If all the waste we generate is biodegradable, will this have no impact on the environment?

Ans: If all the waste we generate is biodegradable, it releases gases like carbon dioxide, hydrogen sulphide and ammonia into the atmosphere. The decomposers may consume more oxygen especially in water bodies and harm the aquatic organisms as there will be lack of oxygen.

Q.22. Why are some substances biodegradable and some non-biodegradable?

Ans: (a) Those substances which can be broken down by the enzymes produced by decomposers are biodegradable.

(b) Since enzymes are specific in their action and there are no enzymes for certain substances, they are non-biodegradable.

Q.23. Give any two ways in which non-biodegradable substances would affect the environment.

Ans: (a) The non-biodegradable wastes are inert and are not degraded by the physical factors of the ambient conditions; they accumulate on the earth.

(b) They may enter the food chain and harm organisms at different trophic levels.

Q.24. How ozone layer is formed?

Ans: At higher levels of the atmosphere, the high energy UV radiation splits apart some molecular oxygen into free oxygen atoms. These atoms then combine with molecular oxygen to form ozone.

Q.25. Why is damage to the ozone layer a cause for concern? What steps are being taken to limit this damage?

Ans: a) Ozone layer shields the earth surface from the UV radiation from the sun.

b) In the absence of ozone layer, UV radiation of the sun reaches the earth surface and it is highly damaging to organisms, hence the depletion of ozone layer a cause for concern.